

## **Abstract**

**Title:** The effect of an active lifestyle for a man and a woman in their middle ages

**Objectives:** The aim is to diagnose the lifestyle of a man and a woman in their middle ages, and on the basis of this diagnosis, determine intervention, both physical and dietary. When the intervention has been finished, the differences in body composition of both individuals will be determined.

**Methods:** Analysis of literature as well as monitoring and measurement was used in this diploma thesis. The target group consists of male and female proband measured at the age of 51 and 47 years. An online application called Sebekoučink on stobklub.cz was used to monitor both physical activity and energy intake. Heart rate monitors Polar RS400 were used to determine the intensity of physical activity. The complete picture of the physical activity of individual was measured using pedometers OMRON Walking style Pro. Body composition was determined by bioelectrical device B.I.A. 2000-M.

**Results:** The monitoring of probands showed signs of sedentary lifestyles. Significantly excessive caloric intake were also found in the male proband. With a six week intervention, there were changes in body composition, which brought loss of weight 10.4 kg for male proband and 4.2 kg for female proband.

**Key words:** physical activity, health, lifestyle, overweight and obesity, body composition, healthy diet